

REMARKS

Claims 1, 4, 9, 10, 13, 18, 20, 23 and 28 have been amended as required by the examiner to provide claims that read on the elected group. Applicants reserve the right to pursue canceled or non-elected subject matter in one or more divisional applications.

Responsive to the action mailed June 17, 2002, applicant elects the invention of Group 1, drawn to methods of treating multiple myeloma with alpha-4 specific antibodies. Applicants respectfully traverse the restriction requirement for the following reasons, at least with regard to groups I, VI and XI.

The preambles of groups I, VI and XI (respectively "treating multiple myeloma," "inhibiting bone resorption associated with tumors of bone marrow" and "treating a subject having a disorder characterized by the presence of osteoclastogenesis") read on overlapping subject matter and thus should be grouped together. For example, the specification provides as follows.

The present invention relates to a treatment for multiple myeloma, and the release of bone-resorbing factors by myeloma cells, resulting in severe bone loss, which is the major side-effect of myeloma in man....

Multiple myeloma is the second most common hematologic malignancy, with 15,000 new cases diagnosed each year and 30,000 to 40,000 myeloma patients in the U.S. annually (Mundy and Bertolini 1986). Eighty percent of the patients suffer from devastating osteolytic bone destruction caused by increased osteoclast (OCL) formation and activity (Mundy and Bertolini 1986). This bone destruction can cause excruciating bone pain, pathologic fractures, spinal cord compression, and life-threatening hypercalcemia. Because multiple myeloma cannot be cured by standard chemotherapy or stem cell transplantation (Attal et al, 1996), and because of the severe morbidity and potential mortality associated with myeloma bone disease, treatment strategies that control the myeloma growth itself, and in particular the osteolytic bone destruction that occurs in these patients, are vitally important. (specification at page 1, line 10 to line 32, emphasis added)

Therefore, the methods of groups VI and XI are directed to treating elements which are very common in the disorder treated in group I. Thus, there is no evidence that groups I, VI and XI would have a separate status in the art or a different field of search. Indeed, groups I, VI and XI are classified in the same class and subclass. Therefore, the Examiner has not established that a serious burden would be involved in searching groups I, VI and XI together. Accordingly,

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Applicants respectfully request that groups VI and XI be reclassified with group I and that groups I, VI and XI (claims 1, 4, 5, 9, 10, 13, 14, 18, 20, 23, 24 and 28) be examined together.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

1. (Amended) A method for the treating multiple myeloma comprising administering to an individual a therapeutically effective amount of a composition comprising an anti-alpha4 integrin antibody homolog or antigen binding fragment thereof [an antagonist of an interaction between an alpha4 subunit-bearing integrin and a ligand for an alpha4 subunit-bearing integrin].

4. (Amended) The method of claim [2]1, wherein the anti-alpha 4 integrin antibody homolog [binding agent] is selected from the group consisting of a) an antibody homolog that antagonizes the interaction of both VLA-4 and alpha4 beta 7 with their respective alpha4 ligands; b) an antibody homolog that antagonizes the interaction of VLA-4 with its alpha4 ligand; and c) an antibody homolog that antagonizes the interaction of alpha4beta7 with its alpha4 ligand.

9. (Amended) [A] The method of claim 1, wherein the composition is administered at a dosage so as to provide from about 0. 1 to about 20 mg/kg body weight of the antibody homolog or antigen binding fragment thereof.

10. (Amended) A method for inhibiting bone resorption associated with tumors of bone marrow, the method comprising administering to a mammal with said tumors an anti-alpha4 integrin antibody homolog or antigen binding fragment thereof, [antagonist of an interaction between an alpha4 subunit-bearing integrin and a ligand for an alpha4 subunit-bearing integrin,] in an amount effective to provide inhibition of said bone resorption.

13. (Amended) The method of claim 10[11], wherein the alpha4 integrin [binding agent] antibody homolog is an anti-VLA4 antibody homolog or anti-alpha4beta 7 antibody homolog.

18. (Amended) The [A] method of claim 10, wherein the [antagonist] is administered at a dosage so as to provide from about 0.1 to about 20 mg/kg, based on the weight of the individual.

20. (Amended) A method of treating a subject having a disorder characterized by the presence of osteoclastogenesis, the method comprising administering to the subject an anti-alpha4 integrin antibody homolog or antigen binding fragment thereof [antagonist of an interaction between an alpha4 subunit-bearing integrin and a ligand for an alpha4 subunit-bearing integrin], in an amount sufficient to suppress the osteoclastogenesis.

23. (Amended) The method of claim [21]20, wherein the anti-alpha4 integrin antibody homolog [binding agent] is an anti-VLA4 antibody homolog or an anti-alpha4 beta 7 antibody homolog [binding agent].

28. (Amended) The method of claim 20, wherein the [antagonist] antibody homolog is administered at a dosage so as to provide from about 0.1 to about 20 mg/kg body weight.